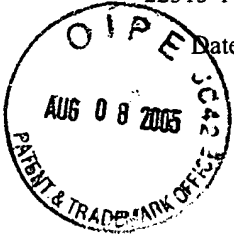


I hereby certify that this correspondence is being deposited with the United States Postal Service on the date set forth below as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



Date of Deposit August 1, 2005

George E. Haas  
George E. Haas, Reg. No. 27,642

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
Before the Board of Patent Appeals and Interferences**

Applicants: Malin E. Holcomb, *et al.*

Art Unit: 3636

Serial No. 10/725,048

Examiner: Edell

Filed: December 1, 2003

For: Adjustable Seat Back for a Wheelchair

---

**SUBMISSION OF APPELLANTS BRIEF ON APPEAL**

---

Mail Stop AF  
Commissioner For Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Appellants hereby submit three copies of their brief in the appeal of the final rejection of the subject patent application.

The \$250.00 fee for filing a brief by a small entity and any other fees due should be charged to Deposit Account No. 17-0055. A duplicate copy of this paper is enclosed for this purpose.

Respectfully submitted,  
Malin E. Holcomb, *et al.*

Dated: August 1, 2005

By: George E. Haas

George E. Haas  
Registration No. 27,642

Quarles & Brady  
411 E. Wisconsin Avenue  
Milwaukee, WI 53202-4497  
(414) 277-5751



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
Before the Board of Patent Appeals and Interferences

Applicants: Malin E. Holcomb, *et al.*

Art Unit: 3636

Serial No. 10/725,048

Examiner: Edell

Filed: December 1, 2003

For: Adjustable Seat Back for a Wheelchair

---

**APPELLANTS' BRIEF ON APPEAL**

---

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

08/09/2005 SHASSEN1 00000039 170055 10725048  
01 FC:2402 250.00 DA

Sir:

Appellants, Malin E. Holcomb, Dan Robertson and Jon-Michael Kasten, having filed a timely Notice of Appeal in the above-identified patent application, hereby submit this brief.

**I. REAL PARTY IN INTEREST**

The present application is assigned to Adaptive Engineering Lab, Inc. of Mill Creek, Washington.

**II. RELATED APPEALS AND INTERFERENCES**

Concurrently with the filing of the appeal in the subject patent application, an appeal also was filed in a continuation of this application, which continuation patent application has been assigned serial no. 10/756,475.

### **III. STATUS OF CLAIMS**

Claims 1-22 currently are pending in the subject patent application and stand finally rejected. This appeal is taken with respect to claims 1-22, which are set forth in Appendix A hereto.

### **IV. STATUS OF AMENDMENTS**

No amendments were submitted after the final Office Action.

### **V. SUMMARY OF THE INVENTION**

The present invention relates to a seat back for a wheelchair.

In order to comfortably accommodate wheelchair users with a wide range of torso sizes, adjustable wheelchair backs were developed. The back was made up of several rigid panels that are movable laterally to match and support the curvature of the wheelchair user's torso. Separate foam pads attached to each panel allowed adjustment of the seat back contour. However, the gaps between the individual foam pads did not provide optimal comfort. In response, the instant invention was developed to improve the comfort of a wheelchair seat back.

Claim 1 specifies a novel wheelchair seat back 20 that has a rigid, curved shell 22 with a back panel 32 from which two wings 38 and 42 extend from opposite lateral sides toward the front of the wheelchair (see Figure 2 and application page 4, line 13 through page 5, line 7). The positions of the two wings are adjustable to alter the curvature of the seat back shell 22 to match the user's torso. A fastener arrangement is provided to attach

the shell to the frame of the wheelchair (see Figure 3 and page 5, lines 8-22). With reference to Figures 1, 4 and 5, claim 1 further recites a unique cushion 24 is attached to the shell 22 and having a single body 80 that stretches and contracts to conform the alteration of the curvature of the seat back shell (see application page 6, lines 14 *et seq.*).

Dependent claim 2 states that the body 80 of the cushion (see Figures 4 and 5) comprises a central section 82 adjacent the back panel 30 of the shell, a first lateral section 84 adjacent the first wing 38, and a second lateral section 86 adjacent the second wing 42 (see application page 6, line 14 - page 7, line 7). The first and second lateral sections 84 and 86 stretch and contract with changes in the positions of the first and second wings.

Dependent claim 3 specifies that the first and second lateral sections 84 and 86 are pleated, such as at areas sections 94 and 96 in the exemplary cushion in Figures 4 and 5 (see application page 7, lines 3-7). Such pleats allow the curvature of the cushion to conform the alteration of the seat back curvature when the wing positions are changed. Thus a single cushion body extends over the entire seat back eliminating the large gaps between the separate foam pieces used on prior adjustable seat backs. The relatively small grooves 92 in the pleated areas 94 and 96 of the present cushion close as the resilient body 80 is bent against the concave surface of the shell 22.

Dependent claims 6, 14 and 19 state that the cushion body 80 is encased in a cover of stretchable material 81 (see Figure 1 and application page 7, lines 8-9).

Claim 11 specifies that each seat back fastener 50 has a bracket 52 attached to the shell and a separate hook portion 68 for engaging the frame of the wheelchair, as seen in Figure 3. The hook portion 68 has an aperture, the bracket has a slot 66, and a threaded fastener 72 passing through the slot and into the aperture (application paragraphs [0017] and [0018]).

Independent claim 12 relates to a novel wheelchair seat back 20 that has a rigid, curved shell 22 with a back panel with a central panel 32 from which first and second lateral panels 34 and 36 project from opposites sides in forward directions. A separate one of two wings 38 and 42 is fastened in an adjustable manner to each lateral panel 34 and 36 (see Figure 2 and application page 4, line 13 through page 5, line 7). The positions of the two wings are independently adjustable to alter the curvature of the seat back shell 22 to match the user's torso. A fastener arrangement is provided to attach the shell to the frame of the wheelchair (see Figure 3 and page 5, lines 8-22).

With reference to Figures 1, 4 and 5, claim 12 further recites a unique cushion 24 of resilient material that is formed by a single body defined by a central section 82 and two lateral sections. The central section 82 is adjacent the central portion 32 of the shell. Extending from the central cushion section 82 of the single body is a first lateral section 84 adjacent the first wing 38 and a second lateral section 86 adjacent the second wing 42 (see application page 6, line 14 - page 7, line 7).

Claim 13 specifies that the body of the cushion in claim 12 stretches and contracts conforming to alteration of the curvature of the shell (page 6, lines 14 *et seq.*).

Independent claim 18 recites a novel wheelchair seat back 20 having a rigid, curved shell 22 that includes a back panel 32 with two vertical sides. A two wings 38 and 42 are adjustably fastened to back panel 32 with one wing projecting forward from each vertical side (Figure 2; application page 4, line 13 through page 5, line 7). fastener arrangement is provided to attach the shell to the frame of the wheelchair (Figure 3 and page 5, lines 8-22).

With reference to Figures 1, 4 and 5, claim 18 further recites a unique cushion 24 attached to the shell 22. That cushion has a single body 80 of resilient material that has a central section 82 adjacent the back panel 32 of the shell, Extending from that central cushion section 82 is pleated first lateral section 84 adjacent the first wing 38 and a pleated second lateral section 86 adjacent the second wing 42 (see application page 6, line 14 - page 7, line 7).

Claim 20 further defines the shell back panel as having a central panel 32 and first and second lateral portion 34 and 36 projects from opposites sides at forward angles. One of the two wings 38 and 42 is adjustably fastened to each lateral portion.

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

- A. Claims 1, 5 and 7-11 were rejected under 35 U.S.C. §102 as being anticipated by the Chew, *et al.* patent.
- B. Claims 2-4, 6 and 12-22 have been rejected 35 U.S.C. §103 as being unpatentable over Chew, *et al.* in view of Stulik.

## VII. ARGUMENT

### A. Claims 1, 5 and 7-11 Are Not Anticipated Under 35 U.S.C. §102

Claims 1, 5 and 7-11 were rejected under 35 U.S.C. §102 as being anticipated by the Chew, *et al.* patent. However, the patent does not come close to teaching a cushion as recited in these claims.

The rejection grossly mischaracterizes the cushion in that reference. Specifically, item 6 of the Office Action states that the patent teaches a cushion attached to a shell and having “a body that stretches and contracts to conform to alteration of the curvature of the shell.” However, nowhere does the patent mention a cushion that stretches and contracts.

Chew *et al.* is primarily directed to describing an adjustable shell that has a base member 15 to which two wings 19 are movably attached to form the skeleton of a seat back. Although covering the shell with a foam cushion is mentioned briefly, the description of that cushion is so sketchy, one can not contend that it suggests, much less anticipates, the present invention. The drawings do not show a cushion and the sum total of information in the specification regarding a cushion is contained in the following four sentences sprinkled throughout the patent:

“The base member consists of one or more rigid shells covered with a compressible foam. (column 1, lines 59-61)

“The back member is covered with a compressible foam and an outer covering.” (column 2, lines 19-20 and again at column 3, lines 46-48)

A foam covering system is provided which accommodates adjustment of the lateral members relative to the back. (column 2, lines 23-23 and again at column 2, lines 23-23)

The base member 15 consists of one or more rigid shells 20 ultimately covered with a compressible foam. (column 2, lines 63-64)

However, these vague references to foam fail to provide sufficient detail to teach the specific body which stretches and contracts to conform to alteration of the curvature of the shell as in claim 1. Nowhere does this patent mention that more than one of the seat back components are covered by the same piece of foam. Chew *et al.* likely is referring to nothing more than a well known wheelchair cushion similar to that in the Jay, *et al.* U.S. patent 5,593,211 (cited in the first Office Action), in which each of the different adjustable sections of the seat shell has a separate body of foam attached thereto that allow those sections to move with respect to one another. The Jay, *et al.* patent also mentions (column 13, lines 10-30) that the individual foam bodies are encased in a single cover as shown in Figure 12.

In fact the Chew *et al.* claims recite using separate foam bodies that accommodate adjustment of the seat back components. For example, its claim 9 states:

“9. A back assembly as set forth in claim 8, wherein said back member is covered by foam and said lateral supports include foam scarfed so as to permit adjustability of the supports relative to the back.” (emphasis added)

The term “scarfed” refers to a joint between two separate bodies in which the abutting edges overlap each other. That overlapping permits the two foam bodies to slide or pivot with respect to each other as the lateral members 19 of the Chew *et al.* seat back are adjusted with respect to the base member 15. Therefore, what little teaching the patent provides about a seat cushion describes one formed by separate foam bodies that move



with respect to each other, but do not stretch and contract, to conform to alteration of the curvature of the shell.

As a consequence, the vague references to a foam cushion and a cover in Chew, *et al.* do not provide a sufficient teaching to anticipate the seat back recited in claim 1 in which the single cushion body stretches and contracts to conform to alteration of the curvature of the seat shell. Therefore, that patent does not render claims 1, 5 and 7-11 unpatentable under 35 U.S.C. §102.

Furthermore, the dependent claims provide additional unique features which are not taught by Chew, *et al.* Claims 7 and 8 further define the structure of the seat back panel to which the two wings are adjustably fastened. Specifically as shown in Figure 1 of the present application, the back panel has a central portion 32 from one side of which a first lateral portion 35 extends at a forward angle, and a second lateral portion 36 extends at a forward angle from another side. As evident from in Figures 2 and 3 of Chew, *et al.*, its back panel 50 is a smooth sheet that gradually curves and does not have a central portion with two separately defined angled lateral portions. In the version of the seat back with the optional spinal channel 56 (see Figure 5 and 6, column 3, lines 40-45), the lateral portions of the back on both side of that channel appear to be coplanar and do not project forward. Certainly those drawings do not depict the back panel in claims 7 and 8.

The fastener arrangement recited in claim 11 also is not disclosed in the Chew, *et al.* patent. Specifically this claim recites a bracket attached to the shell and a hook portion attached to the frame of the wheelchair (Figure 3) wherein the hook portion has an aperture and the bracket has a slot through both of which a threaded fastener passes. The final

Office Action contends (top of page 3) that Chew, *et al.* has the claimed hook portion 35 and bracket 26. However, those components are not connected by a threaded fastener. Instead an unthreaded pin 33, which projects from and is fixed to the bracket 26, passes through an aperture 39 (Figure 10) in the hook portion 35 that pivots about that pin (column 3, lines 19-25.) In addition to the pin being unthreaded, it is not received in a slot of the bracket, as required by claim 11. The Chew, *et al.* bracket having a slot through which other fasteners pass to secure the bracket to the seat shell does not suggest the fastening mechanism for the hook portion recited in claim 11.

The description of the seat cushion in Chew, *et al.* is so cursory that it is inadequate to provide an anticipatory teaching of the present invention. Therefore, the Chew, *et al.* patent does not render claims 1, 5 and 7-11 unpatentable under 35 U.S.C. §102.

**B. Claims 1-5, 8, and 21 Are  
Patentable Under 35 U.S.C. §103**

Claims 2, 3, 4, 6 and 12-22 have been rejected 35 U.S.C. §103 as unpatentable over Chew, *et al.* in view of Stulik.

With respect to claims 2-4, 6 and 13-22, although Chew, *et al.* teaches a wheelchair seat back that has a shell with adjustable lateral wings, it does not suggest a cushion with a body that stretches and contracts or otherwise conforms to alteration of the curvature of the shell as stated above with respect to claim 1. Therefore, this ground of rejection must rely primarily on the Stulik patent for teachings about the seat cushion.

It is respectfully submitted that the characteristics of the Stulik seat cushion for a motor vehicle would not lead one skilled in the art of wheelchairs to combine that cushion

with the adjustable seat back disclosed in the Chew, *et al.* patent. That latter patent describes a seat back in which the lateral, i.e. left and right, sides are adjustable by moving the curved wings 19 in and out to alter the arc of the seat back to match the user's girth. Therefore, any cushion suitable for that type of seat back must accommodate horizontal alteration of the seat back curvature as stated in the patent (see column 3, lines 26-58).

However, the Stulik flat seat cushion adjusts linearly to accommodate occupants of different heights, not widths (column 1, lines 11-23). That document notes that taller persons prefer a higher seat back that better accommodates their taller torso and also a seat bottom that is adjustable front to back to conform to their longer legs. In contrast, a shorter person requires shorter seat elements. It is linear variation of the front to back dimension of the seat bottom and of the height of the seat back to which Stulik's adjustable seat cushion is directed. Note that one of those cushions can be used as the seat bottom, with another separate seat cushion being used as a seat back. Nowhere is there a suggestion of using the linearly adjustable Stulik cushion with a seat as described in Chew, *et al.* in which the lateral or side-to-side curvature is variable, nor does Stulik suggest a seat cushion that could accommodate such lateral adjustment.

In order to support a conclusion that a claimed combination is obvious, the references must either impliedly or expressly suggest the selection of the various elements in that combination, *In re Newell*, 891 F.2d 899, 13 U.S.P.Q.2d 1248, 1250 (Fed. Cir. 1989). What a skilled artisan would find obvious to try is not the test for obviousness under 35 U.S.C. §103, *In re Geiger*, 815 F.2d 686, 2 U.S.P.Q.2d 1276 (Fed. Cir. 1987).

The Office Action has failed to demonstrate how the combined cited art provides that requisite suggestion.

The obvious combination of the articles in the two patents would have the Stulik cushion oriented with dimension D (Figure 1) extending vertically and the grooves 14 between the different cushion sections 12a, 12b and 12c running horizontally on the Chew, *et al.* seat back. However, that would not provide a seat cushion that stretches and contracts to conform to alteration of the horizontal curvature provided by the Chew, *et al.* lateral wings and thus does not suggest the subject matter in claims 2-4, 13, 14 and 18-22.

Significant unobvious modifications of Stulik's cushion would be required for it to work with that curving, laterally adjustable seat back in Chew, *et al.* The first unsuggested modification would be to rotate the cushion orthogonally from the orientation taught in Stulik so that dimension D extends horizontally and the two grooves 14 run vertically. After rotation, the cushion foam would have to be modified to curve and not merely lay flat as disclosed in the patent. Even then, the cushion in that new orientation would not conform the curvature of the Chew, *et al.* seat back because the seat cushion now is not symmetrical left to right. In the new orientation, the two grooves 14 in the cushion at which linear adjustment occurs would be located to one side of the center of the seat back so that the two smaller sections 12b and 12c are also on that side. Therefore, the very large cushion section 12a now extends horizontally across the other half of the seat back. But that larger section does not have a groove 14 and thus would not bend to conform to the curved wing 19 on that side. The resiliency of the foam tends to return that cushion section 12a to its flat form, thereby preventing conformance to a curve. In other words, the Stulik

seat cushion would not fit nor accommodate the lateral adjustments of the Chew, *et al.* shell without significant changes. Nothing suggests all those modifications necessary to make the Stulik cushion fit and work with Chew, *et al.* seat back and considerable experimentation would be required to implement those modifications.

As a result, it is unlikely one of ordinary skill in the art would apply the Stulik seat cushion to the Chew, *et al.* seat back and even doing so would not enable that cushion to conform to alteration of the curvature of the seat back shell.

Claims 2, 3 and 12-22 also state that the shell has a back panel with a central portion from which two lateral panels project forward from each side. A separate wing is attached to each of those lateral panels. As discussed above with respect to claim 7, Figures 2 and 3 of Chew, *et al.* show a gradually curved back panel 50 that does not have separately defined central and lateral portions. In the seat back version with an optional spinal channel 56 (patent Figs. 5 and 6; column 3, lines 40-45) the portions of the back on both side of the channel appear to be coplanar and do not project forward as in the pending claims.

Regardless of the seat back version from Chew, *et al.*, neither that patent nor Stulik suggests a seat cushion with a single body of resilient material that has the sections which conform to or extend adjacent to the back panel and the attached curving lateral wings. Therefore, the structure recited in this group of claims is not suggested by the combination of the two patents cited in the rejection.

In addition to these fundamental differences between the presently claimed subject matter and that disclosed in the cited references, other pending dependent claims specify

more detailed structure that is not disclosed nor suggested by the prior art. Claims 6, 14 and 19 state that the cushion body is encased in a cover of stretchable material. On page 6, the final Office Action makes the unsupported contention that Stulik's cover is inherently of stretchable material. However the patent states that its cover is a layer of cloth or vinyl upholstery material, but such materials are not inherently stretchable. Not only does the reference not mention a stretchable cover, the linear cushion adjustment is accomplished by the cover folding into voids 16 in the foam thereby forming grooves 14. The folding of the cover does not require stretchable material. As a result, nothing about the Stulik seat cushion cover indicates stretchability.

Dependent claim 13 states that the body of the seat cushion in independent claim 12 stretches and contracts to conform to alteration of the length of curvature of the shell which length runs horizontally from side-to-side as the term is defined in the context of claim 12. For the reasons expressed previously with respect to the patentability of claim 1, claim 13 also is patentable.

Independent claim 18 recites a seat shell that has a back panel with two vertical sides from each of which a separate wing adjustably projects forward. A cushion has a single piece body with a central section adjacent the back panel and two pleated lateral sections adjacent the forward projecting wings.

Although Chew, *et al.* has a similar shell, it at best discloses a cushion formed by multiple bodies of foam. Nothing in the Stulik patent suggests a cushion body with different pleated lateral sections. Instead Stulik teaches a cushion that has different sections 12a, 12b and 12c stacked vertically up the seat back and not laterally with respect

to one another. The stated function of that cushion is to lengthen or shorten in the vertical direction to accommodate occupants of a different heights. Therefore, Chew, *et al.* teaches a seat back having a horizontally adjustable curvature, whereas the Stulik patent teaches a cushion that is vertically adjustable in a linear manner. As a consequence, references together do not suggest using their articles in concert, much less modifying Stulik teaching by rotating its cushion and changing the respective sizes of its sections to accommodate the adjustable wings of Chew, *et al.*

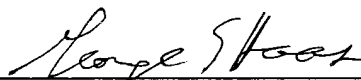
In summary, it is unlikely that a skilled artisan would combine the dramatically different seat cushion in Stulik with the adjustable seat shell in Chew, *et al.* and even that a combination still would not suggest several detailed features of the present invention. Therefore, the office action has failed to establish a *prima facie* case that claims 2, 3, 4, 6 and 12-22 are unpatentable under 35 U.S.C. §103.

## VIII. CONCLUSION

Appellants request reversal of the final rejection in the present patent application.

Respectfully submitted,  
Malin E. Holcomb, *et al.*

Dated: August 1, 2005

By:   
George E. Haas  
Registration No. 27,642

Quarles & Brady LLP  
411 E. Wisconsin Avenue  
Milwaukee, WI 53202-4497  
(414) 277-5751

Q&BMKE/5740505

**APPENDIX A**  
**Claims of Patent Application No. 10/725,048**

1. A seat back for a wheelchair comprising:

a shell which is rigid and curved, the shell having a back panel with two lateral sides, a first wing fastened in a first position to the back panel and projecting forward from one lateral side, and a second wing fastened in a second position to the back panel and projecting forward from the other lateral side, wherein the first position and the second position are adjustable to alter curvature of the shell;

a cushion attached to the shell and having a body which stretches and contracts to conform to alteration of the curvature of the shell; and

a fastener arrangement to attach the shell to a frame of the wheelchair.

2. The seat back as recited in claim 1 wherein the body of the cushion comprises a central section adjacent the back panel of the shell, a first lateral section extending from the central section adjacent the first wing, and a second lateral section extending from the central section adjacent the second wing, wherein the first and second lateral sections stretch and contract with changes in positions of the first wing and second wings.

3. The seat back as recited in claim 2 wherein the first lateral section and the second lateral section of the body of the cushion are pleated.



4. The seat back as recited in claim 1 wherein the body of the cushion has a first surface with a first plurality of grooves extending vertically and a second surface with a second plurality of grooves interleaved with the first plurality of grooves, wherein the first and second plurality of grooves enable the body to stretch and contract with changes in positions of the first wing and second wings.

5. The seat back as recited in claim 1 wherein the body is formed of a resilient foam material.

6. The seat back as recited in claim 1 wherein the cushion further comprises a cover of stretchable material encasing the body and including an element that attaches the cushion to the shell.

7. The seat back as recited in claim 1 wherein the back panel of the shell comprises central portion from one side of which a first lateral portion extends at a forward angle, and from another side of which a second lateral portion extends at a forward angle.

8. The seat back as recited in claim 7 wherein the first wing is adjustably fastened to the first lateral portion, and the second wing is adjustably fastened to the second lateral portion.

9. The seat back as recited in claim 1 wherein the fastener arrangement comprises a plurality of fasteners each having a bracket attached to the shell and a hook portion for engaging the frame of the wheelchair.

10. The seat back as recited in claim 9 wherein the bracket has a slot through which a threaded fastener passes into the shell.

11. The seat back as recited in claim 9 wherein the hook portion is separate from the bracket and has an aperture, the bracket has a slot, and a threaded fastener passing through the slot and into the aperture.

12. A seat back for a wheelchair comprising:

a shell which is rigid and curved, the shell including a back panel that has a central portion with one side from which a first lateral panel projects in a forward direction and with another side from which a second lateral panel projects in the forward direction, the shell further including a first wing fastened at a first position to the first lateral panel and a second wing fastened at a second position to the second lateral panel, wherein the first position and the second position are adjustable to alter a length of curvature of the shell;

a cushion attached to the shell and having a body of a resilient material, wherein the body comprises a central section adjacent the central portion of the shell, a first lateral section extending from the central section adjacent the first wing, and a second lateral section extending from the central section adjacent the second wing; and

a fastener arrangement to attach the shell to a frame of the wheelchair.

13. The seat back as recited in claim 12 wherein the body of the cushion stretches and contracts conforming to alteration of the length of curvature of the shell.

14. The seat back as recited in claim 13 wherein the cushion further comprises a cover of stretchable material encasing the body.

15. The seat back as recited in claim 12 wherein the first lateral section and the second lateral section are pleated.

16. The seat back as recited in claim 12 wherein the body of the cushion has a first surface with a first plurality of grooves extending vertically, and a second surface with a second plurality of grooves interleaved with the first plurality of grooves.

17. The seat back as recited in claim 12 wherein the fastener arrangement comprises a plurality of fasteners each adjustable along two axes and having a hook portion for engaging the frame of the wheelchair.

18. A seat back for a wheelchair comprising:  
a shell which is rigid and curved, the shell having a back panel with two generally vertical sides, a first wing fastened in an adjustable position to the back panel and projecting forward from one vertical side, and a second wing fastened in an adjustable position to the back panel and projecting forward from the other vertical side;

a cushion attached to the shell and having a body of a resilient material, wherein the body comprises a central section adjacent the back panel of the shell, a pleated first lateral section adjacent the first wing, and a pleated second lateral section adjacent the second wing; and

a fastener arrangement to attach the shell to a frame of the wheelchair.

19. The seat back as recited in claim 18 wherein the cushion further comprises a cover of stretchable material encasing the body.

20. The seat back as recited in claim 18 wherein back panel of the shell comprises central portion from one side of which a first lateral portion extends at a forward angle, and from another side of which a second lateral portion extends at a forward angle, wherein the first wing is adjustably fastened to the first lateral portion, and the second wing is adjustably fastened to the second lateral portion.

21. The seat back as recited in claim 18 wherein the body of the cushion has a first surface with a first plurality of grooves extending vertically in the first lateral section and the second lateral section, and a second surface with a second plurality of grooves interleaved with the first plurality of grooves.

22. The seat back as recited in claim 18 wherein the fastener arrangement comprises a plurality of fasteners each adjustable along two axes and having a hook portion for engaging the frame of the wheelchair.

**APPENDIX B**  
**EVIDENCE**

There is no evidence, other than the documents cited in the final Office Action.

**APPENDIX C**  
**RELATED PROCEEDINGS**

There are no decisions in related proceedings.